



SAVING THE ENVIRONMENT USING ECO - LABELS AND STANDARDIZED TEXTILE PRODUCTS

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ABSTRACT

Environmental issues keep arising at all stages of the textiles and apparel supply chain. The excessive consumption and production of textile has contributed to the increase in pollution water shortage, fossil fuel reduction, and climate change.

To save the environment from pollution it is important to explore the uses, benefits and types of textile Eco labels. In this study information has been collected on different types of textiles Eco Labels including private, national, and international Eco – labels along with their objectives prerequisite and products cover by these Eco – Labels. This ultimately improves the quality of environment and encourages sustainable management of resources.

KEYWORDS: Environment, Textiles & Apparel , Eco labels, Eco schemes , Eco mark.

INTRODUCTION:

It is important to take strict measures to reduce the environmental pollution caused by the textile and apparel industries.

Many indigenous textile and clothing exporters have already begun taking measures to protect the environment and answering the developed countries by awarding foreign Eco – Labels largely the Oekotex on their products.

An Eco – Label is a label that approaches the overall environmental aspects of a product or service within a certain product or category. Eco- Label goods meet process standards and convey higher environmental quality to consumer through their label. Introducing Eco – Label allows producers to value process attributes and reward them with environmental friendly attributes. The Indian textiles and apparel industry is not new to the Eco – labeling process. In 1991 started its own Eco – Labeling scheme called Eco mark – for easy identification of environmental friendly products .This label is awarded to consumer goods which meet the specified environmental criteria following an end to end approach and the quality requirements of Indian Standards. Eco – Labels help consumer's retailers and manufacturers in selecting ecofriendly textiles and compel the manufacturers to shift to environmentally friendly methods of production. Increase in green consumerism in the developed countries has promoted the government to bring environment related guidelines that will regulate trade. In this context of ecofriendly products and services that green shopping and environmental labeling has assumed greater significance. Eco – Labeling guarantees certain ecological criteria for all sorts of textile products and their manufacturing process. It helps in identification of products that are environmentally safe, manufactured by environment friendly materials and avoids harmful chemicals.

Environmental labeling programs are gaining popularity all around the world. Many countries have lounge Eco – Labeling schemes started by the governments or by voluntary organizations that have received financial support from their government. Eco – Labels presents a holistic judgment, giving an overall assessment of a product in relation to environmental quality of other products in the same category. It is claim which indicates the environmental aspect of a product or service. Eco – Labeling can accomplish several goals as listed below:

1. Improve sales or image of a labeled product.
2. Stimulate customer awareness about the environmental impact of production.
3. Direct manufacturers for the environmental impact caused by their product.
4. Improve the quality of environment and encourage sustainable management of resources.

Eco – Labeling is a way of life which has already gained importance in the business of consumer goods. Although the definition of Ecofriendly textiles is to be ecologically safe and not harm natural and ecological balance of the environment directly or indirectly, on an approach to define an ecofriendly textiles the concept of smart product developed by Hamburg – based Environment Protection and Encouraging Agency (EPEA) is the best. It defines a product as smart, if it is prescribed by good manufacturing stages, does not cause health damage and environmental damage and at the same time is profitable. Thus the concept of SHE – Safety Health and Environment is used. Within Europe there are many textiles

Eco – Labels – Ecotex ,Gut ,Oekotex , Stitching Milieukeuetc. For the EU Eco – Labels a single set of criteria was agreed which is intended to reduce the impact of production on energy use, global warming, Acid rain, and Water pollution. The Nordic Swan is the world's first multinational environment labeling scheme.

The standard Ecomark schemes of different organizations of Germany are based on seven major Eco parameters:

1. Formaldehyde
2. Toxic pesticides
3. Pentachlorophenol
4. Heavy metal traces
5. Azo dyes which release carcinogenic amines
6. Halogens carriers
7. Chlorine bleaching

The government of India has adopted eco criteria banning the use of relevant Azo dyes (The government of India has banned 40 Benzidine based dyes and 72 others that are based on toxic amines identified by the Indian committee) and formed an Ecomark scheme. The Eco Labeling scheme has been given the responsibility of operating the scheme. The overall goal is to encourage the demand and supply of those products and services that help in reducing stress on the environment thereby stimulating the potential for environmental improvement.

Eco – Labeling Scheme:

A wide range of Eco – Labels cover a variety of textile product groups. Each group has developed the criteria that vary in approach from full lifecycle analysis to schemes that address only the quality of the final product. Types of organizations involved in Eco- Labeling schemes are shown in Table 1.

CLASSIFICATION OF ECO - LABELS	
Independent or Private Eco- Labels	National and International Eco- Labels
A. Institution related – <ul style="list-style-type: none"> • Eco Tex 100 • Eco Tex 1000 • Eco Tex ® • AKN Trademark 	A. Multinational: EU Label, Nordic Swan
B. Producers association AKN members	B. National: Green Mark (China Taiwan province) <ul style="list-style-type: none"> • Environmental Eco Label (Japan) • Eco – Mark (India) • EKO- Seal (Netherlands)
C. Company Eco- Labels Steilmann <ul style="list-style-type: none"> • Otto • Versnadt • Hess Natur, Green cotto 	

TYPES OF LABELS	ABOUT ECOLABELS	PRODUCT CATEGORIES																
Republic of China – Taiwan Green Mark  環保標章	<p>Republic of China – Taiwan Green Mark was launched in 1992 by the EPA.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • To guide the consumers in product purchasing • To encourage manufacturer to design and supply <p>Prerequisites:</p> <ul style="list-style-type: none"> • To be used only by the product categories chosen by the EPA. • The applicant must be company legally registered and owns a licensed factory. • It is the first Eco- Labeling program certified to ISO 9001 	<p>Cloth diapers, Non bleached towels</p> <p>Criteria for cloth diapers</p> <p>The product shall not contain: Fluorescent whitener formaldehyde and other hazardous chemical. The product shall: last for at least 150 times of used (or the packing material) must bare a label reading “Reusable diaper”. The diaper shall contain not less than 50% cotton. The name and address of the Green Mark user must be clearly printed on the product or on the packaging material. For non-manufacturing logo users the manufacturer's name and address shall be shown.</p> <p>Criteria for Non-bleached towels</p> <p>There shall be no use of bleach or any kind of fluorescent whiteners and formaldehyde in the manufacturing process of the product. Any dyestuff used in the manufacturing process must not contain mercury , chromium(+6), cadmium, lead, copper, zinc, arsenic and other heavy metals and their oxides. The product shall be made of 100% natural fiber (or the packaging material) should bare a labeling reading “ Non – bleached” packaging box used for product is recommended to be made of recycled pulp with at least 80% recycled paper</p>																
Thailand (Thai Green Label) 	<p>It was officially undertaken by the Thailand Environment Institute (TEI) in 1994. The Green Label uses life cycle consideration and stresses certain high priority national goals, example waste production, and energy and water conservation. Product selection and criteria a developed with regard to local capability to conduct necessary testing and monitoring.</p>	<p>Product Category:</p> <p>Products made from cloth:</p> <ul style="list-style-type: none"> • Hat, bag • Products made from cloth for a baby • Clothes i.e. shirts, trousers • Clothing accessories • Home and household textile fabrics 																
Korea (Environmental Labeling) 	<p>KELA was formally established in 1994 in association with the Korean Ministry of Environment (MOE). KELA is a non-profit organization. This program is based on the Type 1 scheme (ISO 14024). In cooperation with the MOE, KELA certified products with demonstrable minimization of environmental stress a produced. 79 categories of products and 330 products are certified as of January 2002.</p>	<p>KELA is a non-profit organization. This program is based on the Type 1 scheme (ISO 14024). In cooperation with the MOE, KELA certified products with demonstrable minimization of environmental stress a produced.</p> <ul style="list-style-type: none"> • 79 categories of product groups • 330 products are certified as of January 2002. 																
Japan (Eco Mark) 	<p>The Eco Mark program is established in 1989 by the Japanese Environmental Association (JEA). Products must need the following criteria:</p> <ul style="list-style-type: none"> • Impose less environmental load in comparison to similar products in their manufacture, use and disposal; and • Reduce the environmental load in other ways, contributing significantly to environmental conservations. 	<p>Product Categories:</p> <ul style="list-style-type: none"> • Cloth diapers for infants (24 products- 9 companies) • Unbleached clothes, bed linen and towels(68 products- 55 companies) • Cloth shopping bags (53 products – 27 companies) • Textiles made of waste fibers (122 products – 91 companies) • Clothing made of used PET resin. 																
India Eco Mark 	<p>The government of India lounged the 'Ecomark' scheme in 1991. The label is awarded to consumer goods which meet the specified environmental criteria and the quality requirements of Indian standards. The logo: an earthen pot (uses a renewable resource like earth, does not produce hazardous waste and consumes little energy in making.)</p>	<p>Product Categories: Textiles</p> <table border="1"> <thead> <tr> <th>Made by</th> <th>Baby Clothing</th> <th>Close to skin</th> <th>Outer Fabrics</th> </tr> </thead> <tbody> <tr> <td>a. Cotton, Wool, Manmade fiber and blends</td> <td>×</td> <td>×</td> <td>×</td> </tr> <tr> <td>b. Jute and Jute products</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c. Silk and Silk products</td> <td>×</td> <td>×</td> <td>×</td> </tr> </tbody> </table>	Made by	Baby Clothing	Close to skin	Outer Fabrics	a. Cotton, Wool, Manmade fiber and blends	×	×	×	b. Jute and Jute products				c. Silk and Silk products	×	×	×
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Australia and New Zealand 	<p>Environmental Choice Australia Eco- Labeling Scheme was introduced in 1991. Environmental choice originated from a New Zealand government initiative and international accreditation. New Zealand manages it on the behalf of the Minister of the environment. The Australian scheme, environmental choice Australia trailed in the country from 1991 to 1994 but did not gain wide industrial support.</p>	<p>Product Categories:</p> <ul style="list-style-type: none"> • Wool pile carpets and wool rich pile carpets 																
European Union (Eco -Label "Flower " Scheme) 	<p>It has been in operation since 1993. In 2002 the scheme was derived, now 103 companies – 400 certified products a being produced. Ecological criteria for each product are defined on the basis of life cycle consideration.</p>	<p>Product Categories:</p> <ul style="list-style-type: none"> • Bed Mattress • Footwear • Textile products 																

TYPES OF LABELS	ABOUT ECOLABELS	PRODUCT CATEGORIES
Nordic Countries (Nordic Swan) 	The Nordic environmental label is the official Eco – Label in Norway, Sweden, Finland, Denmark and Iceland. It was created by the Nordic council of Ministers in November 1989. The scheme parallels the EU Eco – Label scheme. The criteria for the program are established on the life cycle analysis of the production of the product category.	Product Categories: <ul style="list-style-type: none">• Textiles• Washable diapers
Austrian Eco – Label 	Austria developed its own national eco labeling system in 1981. In Austria Eco – Labeling represents one of the most important instruments of product oriented environment policy. Expectations of all groups involved in Eco – Labeling are very high as they claim for a transparent, credible scheme of the highest possible quality mixed with a reasonable amount of labeled products in the markets.	Product Categories: <ul style="list-style-type: none">• Textile Floor Coverings
Croatia (Environmental Label) 	The environmental label of the Republic of Croatia demonstrates the relationship of a product to the environment. The requirements to be met in order to be awarded the environmental label of the Republic of Croatia is determined by the Rule Book on environmental label and by specific criteria set for each product group.	Product Categories: <ul style="list-style-type: none">• Linen Towel
Netherlands (Stitching Milieukeur) 	Milieukeur is developed and managed by the Eco Label foundation. Founded in 1992 it is an initiative of the Ministry of housing, planning and environment and the Ministry of Economic affairs.	Product Categories: <ul style="list-style-type: none">• Footwear• Hand dryers (Cotton)
Sweden (Good Environmental Choice)  Bra Miljöval	Good environmental choice is the Eco- Label of the Swedish society for nature conservation (SSNC). This was started in the year 1988.	
The Oeko - Tex® Standard 100 PLU 	A company that is certified in accordance with the Oeko Tex ® Standard 100 its products are already certified in accordance with the Oeko Tex ® 1000 , the Oeko Tex 100 PLU. This standard under certain circumstances is awarded to a group or a product. The prerequisite for the award is the evidence that the entire production chain is involved in the production of a specific product in order to comply with the requirements of this standard.	
The Oeko - Tex ® Standard 1000 	The Oeko – Tex ® Standard 1000 is issued by well-known independent Textile Industries who have come together under the name “Oeko – Tex ® International – Association for the Assessment of Environmentally Friendly Textiles”. Its headquarters are in Zurich. This is a testing auditing and certifying system of environmentally friendly production site	
The Oeko – Tex ® Standard 100 	The test for harmful substances in Textiles was first introduced in 1992. This made it possible to develop a common understanding of the problems within a textile supply chain for the very first time. Legal restrictions form the basis of the list of test criteria while the risk analysis of problem causing substances was also scientifically evaluated. This is specified in the Oeko – Tex ® Standard 100. Now more than 6500 Textile and Clothing manufacturers across 80 countries use the Oeko – Tex ® System to make improvements in their products. More than 50,000 certificates have been distributed for millions of individual products.	

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